

MA-55

Automatic stretch wrapping machine

description

Orion's MA-55 is a operatorless, rotary tower stretchwrapping system that unitizes pallet loads automatically by rotating a film carriage around a stationary load. The system can be integrated into an existing conveyor line or loaded and unloaded via lift truck. This heavy-duty, mid-priced system is appropriate for use in a variety of industrial packaging applications.

operation

- 1) Load brought to infeed conveyor
- 2) Load is automatically conveyed to wrap zone
- 3) Automatic wrap cycle begins
- 4) After wrap cycle, film tail is cut & wiped to load
- 5) Load is automatically conveyed to exit zone

• MA-55 features

- Automatic operation saves labor costs, improves efficiency and package appearance
- Rotary tower wrapping method well-suited for extra light, unstable or heavy loads
- Welded structural steel 4-leg frame engineered for high stability and long service life
- High performance film delivery system yields 245% prestretch (standard)
- Handles loads weighing up to 4,000 pounds (standard)
- Automatically adjusts for various load heights (up to 80" maximum)
- 16 RPM maximum tower rotation for rated throughput of 45 loads/hour
- Positive home alignment puts carriage in same position after each cycle
- Rotational safety photoeye beam stops machine if beam is broken
- State-of-the-art Allen Bradley PLC Controller
- 20" precision ring bearing tower support with ANSI chain/sprocket drive for ultra-reliability
- Non-proprietary replacement parts can be purchased locally or from dealer
- Self-threading Insta-Thread carriage makes loading film fast, safe and easy



Film Delivery System

The 'heart' of the MA-55 is the Insta-Thread™ film delivery system, an extremely reliable film carriage engineered to accurately pre-stretch film at a fixed rate and deliver it to the load at a constant tension level. Threading film on the Insta-Thread is fast, easy and safe, no hands or fingers in or around pre stretch rollers.



Threading the Insta-Thread film carriage is fast and simple. Simply open the hinged roller frame and pull the film through, then latch the roller frame closed.

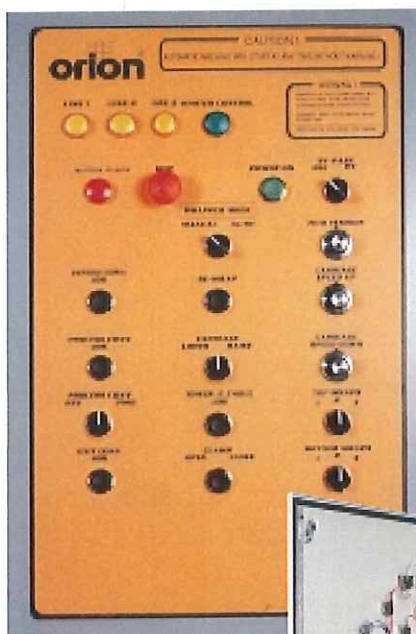
- Lifetime warranty on prestretch rollers
- Uses standard 20" stretch film rolls
- Precision ground, polyurethane pre-stretch rollers for consistent, maximum film yield
- 245% standard pre-stretch ratio (optionally available from 100% to 425%)
- Carriage lifted by heavy-duty ANSI industrial chain
- Revo-Logix™ exact wrap count technology eliminates film waste by applying top & bottom wraps precisely
- Electronic film tension control on control panel
- Full authority film dancer bar with non-wearing sensor adjusts film output to compensate for corners of load
- Heavy-duty ANSI chain & sprocket ratio control
- Multi-point UHMW precision carriage guidance system for smooth, trouble-free operation
- End of cycle film force release prevents film jams
- Highly responsive corner compensation assures consistent stretch film application
- Carriage tilted to wrap load to pallet



The Insta-Thread film carriage sets the pace for its high degree of sensitivity, superior performance and rugged design.

Controller

- Free standing, CSA Approved, UL Listed, NEMA 12 rated control panel
- Allen Bradley SLC500 PLC controller for maximum flexibility
- Clearly marked, easy to use operator interface
- Large mushroom-style Emergency E-Stop button
- Adjust film tension easily with Film Tension knob
- Non-proprietary pushbuttons & switches
- Separate count selectors for top & bottom Wraps
- Separate settings for carriage up and down speed
- Raise & lower film carriage manually with the Carriage Jog button
- Rewrap button to rewrap load after film roll replacement or E-Stop
- Rotate the tower manually with the Tower Jog button
- Conveyor Jog pushbuttons
- Current overload protection
- Load/personnel safety stop photocell system



The control panel on the MA-55 is simple and easy to understand. A look inside the panel reveals a clean design, neatly bundled wiring, and pride of craftsmanship



Heavy-duty conveyors

Orion conveyors have a rock-solid reputation for long term durability and reliability. From their structural steel frames to their heavy duty bearings, these conveyors are built to last!

- 100% Orion manufactured using 100% structural steel for maximum strength & durability
- 5' Infeed, 11' Process, 5' Exit conveyor included (all powered)
- 4,000 pound maximum load weight capacity
- 18" Height to Top of Rollers
- 52" Effective conveyor width
- 2.5" diameter rollers on 3.75" centers
- All rollers driven via heavy duty ANSI chain loop to loop
- 40 fpm standard conveyor speed
- AC fixed speed drive
- Fully automatic sequencing logic



Each conveyor roller is supported by a full length solid steel axle and welded-on (not pressed) end caps. These axles are then supported with individual cast housing bearings for the ultimate in strength and reliability.



Chain guards have been removed for photography.

Orion conveyors have been proven rugged and highly reliable in thousands of installations around the world.

Film tail cut & wipe

Simple, yet highly effective aptly describes the unique film tail treatment system on the MA-55. At the end of the wrapping cycle, Orion's innovative asymmetrical film clamp grips the film web while the "no build-up" thermal cutter bar cuts the film. Then, Orion's load-seeking pneumatically actuated brush smooths and secures the film tail to the side of the load as it is conveyed to the exit conveyor. The result is an attractive, secure film tail that stays in place.

- Pneumatically operated film clamp with sectioned design for proper grip & release
- Pneumatically actuated thermobar cutting system positively seeks the load for reliable, consistent film tail brush down.
- Thermobar design assures no build-up of film on cutting system
- Pneumatically actuated film tail brush load seeking film tail brush actually "seeks" the load and gently smooths and secures the film tail



Tower drive

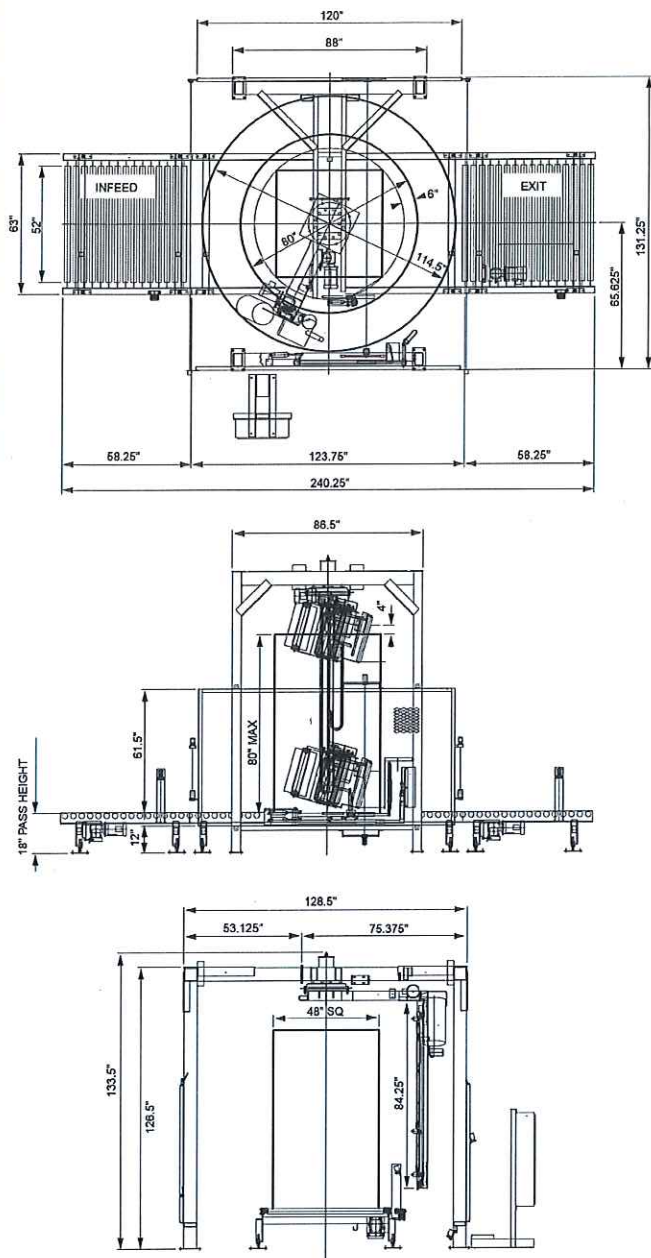
- 20" diameter precision ring bearing
- State-of-the-art, digitally programmed AC variable frequency drive
- Elegantly simple yet highly efficient & durable
- Variable speed drive motor: 0-16 RPM
- Industrial grade ANSI chain/sprocket
- Positive home position alignment
- Non-proprietary replacement parts
- All components easily accessible
- Adjustable soft-start and stop



PACKAGING
EQUIPMENT LLC

PO Box 80, Bensenville IL 60106

MA-55 Dimensions



MA-55 Specifications

Machine Performance

Rotation speed	Variable to 14 RPM
Production capacity	50 - 70 loads / hour

Film Delivery System

Prestretch ratio	245% (standard)
Threading method	Insta-Thread™
Film output control	Dancer roller & non-wearing sensor

Load Specifications

Maximum load weight	4,000 lbs. dynamic 20,000 lbs. static
Maximum load size	48"W x 48"L x 80" H
Minimum load size	30"W x 30"L x 26" H

Conveyor Specifications

Speed	40 fpm
Roller spacing	2.5 dia. on 3.75" centers
Drive	AC fixed speed

Power Requirements

208 / 3 / 60 15 amp

Pneumatic Requirements

3 CFM @ 80 psi

Structural Design

- 100% Structural steel used throughout
- Free standing 4-leg design
- Metal intrusion fencing around process area
- Portable after initial installation

Estimated Shipping Weight

6,500 pounds

Warranty

Components	3 years
Structural	5 years
Prestretch roller	Lifetime



distributed by

AEK PACKAGING EQUIPMENT LLC
PO Box 80, Bensenville IL 60106



Orion Packaging Systems, Inc.
A Pro Mach Operating Partner
USA Corporate Headquarters
100 Crescent Drive
Collierville, TN 38017
Toll Free (800) 333-6556
Telephone (901) 888-4170
Fax (901) 365-1071
CANADA Manufacturing
2270 Industrial Blvd
Laval, Montreal, H7S 1P9
Telephone (450) 667-9769
Fax (450) 667-6320
Email: sales@orionpackaging.com
Web: www.orionpackaging.com
Bulletin #MA55.10/00.JKG